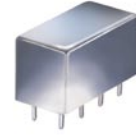


# Plug-In Frequency Mixer

## SRA-6

Level 7 (LO Power +7 dBm) .003 to 100 MHz



CASE STYLE: A01

### Maximum Ratings

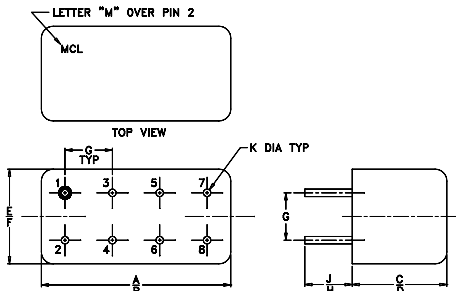
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

### Pin Connections

LO	8
RF	1
IF	3,4 <sup>^</sup>
GROUND	2,5,6,7

<sup>^</sup> pins must be connected together externally

### Outline Drawing



NOTE: BLUE BEAD INDICATES PIN 1. PIN NUMBERS DO NOT APPEAR ON UNIT, FOR REFERENCE ONLY.

### Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K		wt
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		5.2

### Features

- excellent conversion loss, 4.58 dB typ.
- high L-R isolation, 45 dB typ. L-I isolation, 40 dB typ.
- rugged welded construction
- hermetic

### Applications

- VHF TV
- defense & federal communications
- radio astronomy

### Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF $f_L$ - $f_U$	IF	Mid-Band m		Total Range Max.	Total Range Max.	L		M		U		L		M		U	
		$\bar{X}$	$\sigma$			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
.003-100	DC-100	4.58	.05	7.5	8.5	60	50	45	30	35	25	60	45	40	25	30	20

1 dB COMP.: +1 dBm typ.

L = low range [ $f_L$  to  $10 f_L$ ]

m = mid band [ $2 f_L$  to  $f_U/2$ ]

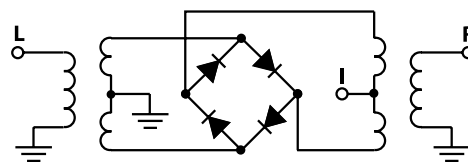
M = mid range [ $10 f_L$  to  $f_U/2$ ]

U = upper range [ $f_U/2$  to  $f_U$ ]

### Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
0.003	30.003	6.08	61.88	63.93	1.25	2.77
0.10	30.10	5.90	62.42	63.98	1.25	2.73
0.20	30.20	5.92	62.44	64.17	1.25	2.68
0.50	30.50	5.87	62.74	64.06	1.25	2.59
0.80	30.80	5.87	62.70	64.22	1.24	2.60
1.00	31.00	5.82	62.48	64.07	1.23	2.58
2.00	32.00	5.85	62.34	63.72	1.21	2.63
5.00	35.00	5.93	61.61	63.44	1.18	2.61
10.00	40.00	5.96	56.55	56.72	1.15	2.55
20.00	50.00	6.13	49.50	49.60	1.13	2.55
22.23	52.23	6.08	48.53	48.53	1.10	2.56
29.63	59.63	6.15	44.72	43.96	1.08	2.56
37.04	7.04	6.11	42.63	43.10	1.07	2.56
44.45	14.45	6.17	41.27	41.40	1.06	2.56
50.00	20.00	6.25	39.99	40.43	1.08	2.55
70.37	40.37	6.51	34.72	35.50	1.13	2.57
77.78	47.78	6.81	34.07	32.41	1.15	2.71
85.19	55.19	7.08	33.63	31.31	1.15	2.79
92.59	62.59	7.13	34.08	31.97	1.14	2.86
100.00	70.00	7.24	36.43	32.88	1.15	2.70

### Electrical Schematic



# Performance Charts

# SRA-6

